CLAIMS

What is claimed is:

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1. A lamp housing apparatus comprising:

a reflector capable of reflecting a visible light but passing a radiation emitted from a light source disposed within the reflector; and

a housing coupled to the reflector, the housing having an inner surface capable of absorbing the passed radiation and an outer surface having a plurality of formations to enlarge the area of the outer surface so that the absorbed radiation can be transmitted as heat from the inner surface to the outer surface at a reduced temperature.

2. The lamp housing apparatus of claim 1, wherein the housing is further capable of blocking the visible light that strays from the reflector.

3. The lamp housing apparatus of claim 2, wherein the inner surface of the housing is prepared to block the stray visible light.

4. The lamp housing apparatus of claim 2, wherein the inner surface of the housing is prepared to enhance absorptivity of the passed radiation.

5. The lamp housing apparatus of claim 4, wherein the inner surface of the housing is prepared to enhance absorptivity of the passed radiation by applying a coating of an opaque material.

6. The lamp housing apparatus of claim 5, wherein the opaque material is paint.

7. The lamp housing apparatus of claim 4, wherein the inner surface of the housing is prepared to enhance absorptivity of the passed radiation by anodization.

8. The lamp housing apparatus of claim 4, wherein the inner surface of the housing is prepared to enhance absorptivity of the passed radiation by peening.

9. The lamp housing apparatus of claim 4, wherein the inner surface of the housing is prepared to enhance absorptivity of the passed radiation by knurling.

10. The lamp housing apparatus of claim 2, wherein the outer surface of the housing blocks the stray visible light.

11. The lamp housing apparatus of claim 1, wherein the housing is capable of containing an explosion of the light source.

12. The lamp housing apparatus of claim 1, wherein the absorbed radiation is infrared (IR) radiation.

13. The lamp housing apparatus of claim 1, wherein the plurality of formations are plates disposed in a parallel manner across the outer surface of the housing.

14. The lamp housing apparatus of claim 1, wherein the plurality of formations are fins disposed longitudinally across the outer surface of the housing.

15. The lamp housing apparatus of claim 1, wherein the plurality of formations are rings disposed latitudinally across the outer surface of the housing.

16. The lamp housing apparatus of claim 1, wherein the housing and the reflector are formed as an integral unit.

17. A apparatus comprising:

a means for a reflector that is capable of reflecting a visible light but passing a radiation emitted from a means for a light source disposed within the reflector; and

a means for a housing coupled to the reflector means, the housing means having an inner surface and an outer surface, wherein the housing means include a means for absorbing the passed radiation through the inner surface and a means for enlarging the area of the outer surface with a plurality of formations so that the absorbed radiation can be transmitted as heat from the inner surface to the outer surface at a reduced temperature.

18. The apparatus of claim 17, wherein the housing means further includes a means for blocking the visible light that strays from the reflector.

19. The apparatus of claim 18, wherein the means for blocking the stray visible light is provided by applying to the inner surface a coating of an opaque material.

20. The apparatus of claim 19, wherein the opaque material is paint.

21. The apparatus of claim 17, wherein the means for absorbing the passed radiation through the inner surface is enhanced by applying to the inner surface a coating of an opaque material.

22. The apparatus of claim 21, wherein the opaque material is paint.

23. The apparatus of claim 17, wherein the means for absorbing the passed radiation through the inner surface is enhanced by anodizing the inner surface.

24. The apparatus of claim 17, wherein the means for absorbing the passed radiation through the inner surface is enhanced by peening the inner surface.

25. The apparatus of claim 17, wherein the means for absorbing the passed radiation through the inner surface is enhanced by knurling the inner surface.

26. The apparatus of claim 18, wherein the means for blocking the stray visible light is provided by the outer surface of the housing.

27. The apparatus of claim 17, wherein the housing further includes means for containing an explosion of the light source.

28. The apparatus of claim 17, wherein the means for absorbing the passed radiation includes a means for absorbing infrared (IR) radiation.

29. The apparatus of claim 17, wherein the plurality of formations are plates disposed in a parallel manner across the outer surface of the housing.

30. The apparatus of claim 17, wherein the plurality of formations are fins disposed longitudinally across the outer surface of the housing.

31. The apparatus of claim 17, wherein the plurality of formations are rings disposed latitudinally across the outer surface of the housing.

32. The apparatus of claim 17, wherein the housing and the reflector means are formed as an integral unit.

33. A method for managing light and radiation in a lamp comprising:

disposing a lamp that emits a visible light and a radiation in a reflector, the reflector reflecting the visible light but passing the radiation; and

encasing the lamp and reflector in a housing, the housing having an inner surface that absorbs the passed radiation and an outer surface from which extend a plurality of formations to enlarge the area of the outer surface so that the absorbed radiation can be emitted as heat from the outer surface at a reduced temperature.

34. The method of claim 33, further comprising blocking the visible light that strays from the reflector with the housing.

35. The method of claim 34, wherein the blocking is performed by the inner surface of the housing.

36. The method of claim 34, wherein the blocking is performed by the outer surface of the housing.

37. The method of claim 34, further comprising containing an explosion of the lamp with the housing.

38. The method of claim 34, wherein the absorbed radiation is infrared (IR) radiation.

39. The method of claim 34, wherein the plurality of formations are plates disposed in a parallel manner across the outer surface of the housing.

40. The method of claim 34, wherein the plurality of formations are fins disposed longitudinally across the outer surface of the housing.

41. The method of claim 34, wherein the plurality of formations are rings disposed latitudinally across the outer surface of the housing.

42. The method of claim 34, further comprising forming the housing and the reflector as an integral unit.

43. A projection lamp system, comprising:

a projector case having a touchable surface;

a lamp housing disposed within the projector case, the lamp housing having a reflector capable of reflecting a visible light but passing a radiation emitted from a light source disposed within the reflector; and a housing coupled to the reflector, the housing having an inner surface capable of absorbing the passed radiation and an outer surface having a plurality of formations to enlarge the area of the outer surface so that the absorbed radiation can be transmitted as heat from the inner surface to the outer surface at a reduced temperature, and so that the touchable surface of the projector case is within the safety requirements for touch temperature.

44. The projection lamp system of claim 43, wherein the housing is further capable of blocking the visible light that strays from the reflector.

45. The projection lamp system of claim 44, wherein the inner surface of the housing is prepared to block the stray visible light.

46. The projection lamp system of claim 44, wherein the inner surface of the housing is prepared to enhance absorptivity of the passed radiation.

47. The projection lamp system of claim 46, wherein the inner surface of the housing is prepared to enhance absorptivity of the passed radiation by applying a coating of an opaque material.

48. The projection lamp system of claim 47, wherein the opaque material is paint.

49. The projection lamp system of claim 46, wherein the inner surface of the housing is prepared to enhance absorptivity of the passed radiation by anodization.

50. The projection lamp system of claim 46, wherein the inner surface of the housing is prepared to enhance absorptivity of the passed radiation by peening.

51. The projection lamp system of claim 46, wherein the inner surface of the housing is prepared to enhance absorptivity of the passed radiation by knurling.

52. The projection lamp system of claim 44, wherein the outer surface of the housing blocks the stray visible light.

53. The projection lamp system of claim 43, wherein the housing is capable of containing an explosion of the light source.

54. The projection lamp system of claim 43, wherein the absorbed radiation is infrared (IR) radiation.

55. The projection lamp system of claim 43, wherein the plurality of formations are plates disposed in a parallel manner across the outer surface of the housing.

56. The projection lamp system of claim 43, wherein the plurality of formations are fins disposed longitudinally across the outer surface of the housing.

57. The projection lamp system of claim 43, wherein the plurality of formations are rings disposed latitudinally across the outer surface of the housing.

58. The projection lamp system of claim 43, wherein the housing and the reflector are formed as an integral unit.